Approved For Release 2001/08/02 : CIA-RDP78-02820A000700060005-3

21 September 1961

MEMOR	۵	MIXIM	TO	THE	FILE

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FROM:

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SUBJECT: Trip Report -

1. Because of an expected large increase in traffic volume during the recent OAS conference, it was decided to install two-way radio teletype in the commo facility at

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- 2. I arrived in 124 July 1961. The following day, the technician from arrived. The new equipment and materials 25X1A6a for the installation was held in customs and was not released until 3 August.
- 3. During the time the equipment was held in customs it was necessary that we revemp and rewire both the OPS and SP rooms. None of the antenna coaxial leads were properly marked or known and it became necessary to cut all of them and rework them on top of the building (12 floors up) as well as below. The ASR teletype machine (S.P.) was rewired for use as a back-up for the new teletype equipment. One VRA receiving whip antenna was installed, and a new transmitting dipole was built and installed. SP recorders were wired to receivers. A new power line was put in from the main power source of the building. Both the S.P. function and the commo functions are now fully integrated both using the same power, sharing antennas, teletype equipment, emergency generator, etc.
- 4. The new equipment finally broke customs on 3 August. We sent an activation request for OTT traffic on 5 August, and was notified 7 August to activate.
- 5. The ATS-50 antenna tuner was sent in a later shipment and was also held in customs.
- 6. We finished the installation after midnight on several days so that the operators could clear all traffic and the SP crew could also continue their work. At times there were as many as nine operators busy, so that wiring and installation was impossible during the day.

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- 7. departed after the completion of the installation, while I stayed on to do odd jobs working on receivers, electric typewriters, air-conditioners, recorders, etc. awaiting the arrival from customs the ATS-50, which was finally installed.
- 8. The COS in asked me to check out a local broadcast station and make recommendations for future expansion and improvements. This was accomplished; the write-up of which will be incorporated in the COS's report to DIR.

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9. Drawings of the completed installation at have been submitted to OC-E/FES for drafting and to be incorporated in the reports.

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10. I arrived in

5 September 1961.

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- 11. Teletype and exciter equipment necessary for the receipt and transmission of radio teletype had not been released from customs, and was still in customs when I departed one week later.
- 12. The operating room at was in bad shape from a cleanliness viewpoint. The floor had been swept clean by the TDY operator from and by the newly arrived SP operators, but still looked messy. Coffee had been spilled over the top of the GPT-750 transmitter, and had not been wiped off. As a result, the top of the transmitter had become rusty. Temporary wiring had been put in to accommodate the S.P. team, and equipment had been reshuffled.
- 13. The GPT-750 was feeding a premax whip which had been adjusted to a length of about 15 feet (presumably to tune it to some high frequency in use). There is no ground plane for this whip and the braid of the coax feeding it is effectively floating. This type installation will not due for RTTY operation without burning out coax, etc.
- 14. It was recommended and approved that the spare ATS-50 antenna coupler complete with 35 foot whip and base be sent from for installation.
- 15. is a competent technician who has been given the job of rewiring and installing new equipment at the commo facility.

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Recommendations:

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Due to my own observations and by reports from technicians servicing Commo stations, I strongly recommend that the A.D. engineer make a tour of all stations under his jurisdiction which have not recently been visited or are suspected as being faulty. He may thereby obtain a clearer picture of the present condition of these stations and be able to make recommendations to improve them. A team of two technicians could follow the engineers direction and accomplish whatever he feels is necessary, allowing sufficient time to insure that new materials and equipment had arrived at these stations before the technicians were allowed to proceed.

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General Information:

Whenever 511's or other receivers with unbalanced audio output are used with the balanced input of the Northern frequency shift converters, one half of the input transformer is shorted out, thus causing a decrease in the input impedance from 600 to 150 ohms. This loads down the receiver and causes **from** 25X1A6a lower audio output. I modified three of these converters in balanced to unbalanced input by simply cutting off two wires from the input transformers, thereby removing the ground from the center tap of these transformers. The increase of audio output from the 51J receivers was remarkable.

Headquarters informed the field that it is not desireable to send FSK crystals to the field because they do not wish to be "rock" bound, and prefer excitation to the FSK from a master oscillator. While I agree with this to a degree, there are a couple of objections to this. First there is the problem of changing the multiplication ratio on the FSK when installed in the GPT-750; this being very difficult to see and reach. Secondly, if the PMO becomes inoperative (troubles beyond tubes) there is no crystal back-up. This assumes no spare PMO's available. I believe the PMO should be used whenever possible to enable the operator to "slide" out of QRM on a primary frequency, but upon request for a change in frequency which would require a change in multiplication ratio at the FSK, the operator could switch to a crystal position which would have a preset multi-ratio.

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Distribution:

Original - Routing/File - Monthly Report 1 -- RES Chrono

Attachments:

- 1. RF Patch Panel Dwg.
- 2. Power Wiring Dwg. (1)
- 3. Teletype Patch Panel and Terminal Block Wiring
- 4. Roof Antenna Layout Dwg.

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